

WR-42 Waveguide Direct Read Attenuator, 0 to 50 dB, From 18 GHz to 26.5 GHz, UG-595/U Square Cover Flange, Dial

PE-W42AT5001



Features

- WR-42
- 18 to 26.5 GHz
- 0 to 50 dB minimum attenuation range
- Stable base with height adjustable feet (1/2 inch)
- UG-595/U Flange
- 1.15:1 Maximum VSWR
- 2% attenuation accuracy over most of the attenuation range.
- 1 Watt Maximum Power
- Easy to read drum scale

Applications

- Instrumentation
- System Calibration
- Research and Development
- Test Benches

Description

The PE-W42AT5001 is a continuously variable attenuator that has “direct read” capability which allows the user to dial-in the amount of attenuation needed to within 2% accuracy over most of the attenuation range. Designed for the WR-42 frequency range (18 to 26.5 GHz), it is constructed using a precision rotary resistive vane in a circular waveguide. The attenuation level is stable, highly repeatable and accurate across the full frequency and attenuation range. This attenuator is ideal for precision measurements in demanding applications like instrumentation and system calibration.

Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	18		26.5	GHz
Attenuation	0		50	dB
Accuracy %		±2	±4	%
VSWR			1.15:1	
Insertion Loss			0.5	dB
Input Power, CW			1	Watt

Attenuation Accuracy

Description	F1	F2	F3	F4	F5	Units
Attenuation Setting	10	20	30	40	50	dB
Accuracy	±0.2	±0.4	±0.6	±1.6	±2	dB

Electrical Specification Notes:

Attenuation Accuracy is 0.1 dB or 2% of reading, whichever is greater, to 40 dB and 4% of reading from 40 dB to 50 dB.

Maximum attenuation setting is 60 dB

Mechanical Specifications

Size

Length	4.74 in [120.4 mm]
Width	9.38 in [238.25 mm]
Height	0 in [0 mm]
Weight	2.99 lbs [1.36 kg]

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Tuner Body Material and Plating
Tuner Finish

Aluminum
Black

Configuration

Connectors

Description	Flange 1	Waveguide	Flange 2
Designation	UG-595/U	WR-42	UG-595/U
Type	Square Cover		Square Cover
Material	Brass	Brass	Brass
Plating	Gold	Gold	Gold
Plating Specification	ASTMB488	ASTMB488	ASTMB488
Finish	Gold	Gold	Gold

Environmental Specifications

Temperature

Compliance Certifications (see [product page](#) for current document)

Plotted and Other Data

Notes:

WR-42 Waveguide Direct Read Attenuator, 0 to 50 dB, From 18 GHz to 26.5 GHz, UG-595/U Square Cover Flange, Dial from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Waveguide Direct Read Attenuator, 0 to 50 dB, From 18 GHz to 26.5 GHz, UG-595/U Square Cover Flange, Dial PE-W42AT5001](#)

URL: <https://www.pasternack.com/50-db-waveguide-direct-read-attenuators-wr-42-26.5-ghz-pe-w42at5001-p.aspx>

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PE-W42AT5001 CAD Drawing

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